

IN THE CLAIMS:

Please amend Claims 1, 2, 7 to 11, 13 to 19, 22, 23, 27 to 30, and 32 as shown below. Please cancel Claims 24, 25 and 26 without prejudice or disclaimer of subject matter. Please add new Claims 33 to 43. The claims, as currently pending in the application, read as follows:

1. (Currently Amended) An ~~automatic~~ authentication method in a print process that requires user authentication, comprising the steps of:
~~extracting~~ obtaining information ~~related to~~ identifying an application ~~and/or~~
~~a document for the print process as attribute information~~ which has issued an instruction to
print electronic data of a print object; and

executing user authentication for approving or accounting for an output of
the electronic data based on the ~~attribute~~ information identifying the application.

2. (Currently Amended) The method according to claim 1, further
comprising a step of extracting attribute information including the information identifying
the application from the electronic data of the print object, and

wherein the attribute information contains various kinds of document attribute information including at least one of a document name, application name, document creator/updater, affiliation of the document creator/updater, password, create/update date, which are associated with a document print process.

3. (Original) The method according to claim 1, further comprising the step of executing, when user authentication has succeeded and a print process is executed, an accounting process of expendables associated with the document print process for each user or each department of a group to which the user belongs.

4. (Original) The method according to claim 1, wherein the attribute information contains various kinds of application attribute information including at least one of an application name, application user, affiliation of the application user, password, use date, which are associated with the application used.

5. (Original) The method according to claim 1, further comprising the step of executing, when user authentication has succeeded and a print process is executed, an accounting process associated with use of the application for each user or each department of a group to which the user belongs.

6. (Original) The method according to claim 1, wherein user authentication is executed by comparing an ID and password found based on the attribute information, and an ID and password that a user inputs to a printer.

7. (Currently Amended) An ~~automatic~~ authentication system in a print process that requires user authentication, comprising:

means of ~~extracting~~ obtaining information ~~related to~~ identifying an application ~~and/or a document for the print process as attribute information;~~ which has issued an instruction to print electronic data of a print object; and

means of executing user authentication for approving an output of the electronic data or accounting based on the ~~attribute~~ information identifying the application.

8. (Currently Amended) The system according to claim 7, further comprising means of extracting attribute information including the information identifying the application from the electronic data of the print object, and

wherein the attribute information contains various kinds of document attribute information including at least one of a document name, application name, document creator/updater, affiliation of the document creator/updater, password, create/update date, which are associated with a document print process.

9. (Currently Amended) The system according to claim ~~[[7]]~~ 8, wherein said ~~automatic~~ authentication system comprises a client computer or print server which is installed with a printer driver, a server for managing a network, and a printer for executing the print process, which are connected via a network, and

said obtaining means and extraction means ~~[[is]]~~ are included in the printer driver, and said user authentication means is included in the server.

10. (Currently Amended) The system according to claim ~~[[7]]~~ 8, further comprising means of, when user authentication has succeeded and a print process is

executed, executing an accounting process of expendables associated with the document print process for each user or each department of a group to which the user belongs.

11. (Currently Amended) The system according to claim [[7]] 8, wherein the attribute information contains various kinds of application attribute information including at least one of an application name, application user, affiliation of the application user, password, use date, which are associated with the application used.

12. (Original) The system according to claim 7, further comprising means of, when user authentication has succeeded and a print process is executed, executing an accounting process associated with use of the application for each user or each department of a group to which the user belongs.

13. (Currently Amended) The system according to claim [[7]] 8, wherein said ~~automatic~~ authentication system comprises a client computer or print server which is installed with a printer driver, and a printer for executing the print process, which are connected via a network, and

said obtaining means and extraction means is included in the printer driver, and said user authentication means is included in the printer.

14. (Currently Amended) The system according to claim [[7]] 8, wherein said user authentication means compares an ID and password found based on the attribute information, and an ID and password that a user inputs to a printer.

15. (Currently Amended) A printer driver in an authentication system which executes a print process that requires user authentication, comprising:

~~means a receiving step of receiving information related to identifying an application and/or a document for the print process as attribute information which has issued an instruction to print electronic data of a print object;~~

~~means a selecting step of extracting selecting information required for user authentication from the attribute information identifying the application received in said receiving step;~~

~~means a sending step of sending a user authentication request appended with the extracted selected information to a server via a network; and~~

~~means a controlling step of, when user authentication has succeeded, controlling a printer to execute the print process.~~

16. (Currently Amended) A printer driver in an automatic authentication system which executes a print process that requires user authentication, comprising:

~~means a receiving step of receiving information related to identifying an application and/or a document for the print process as attribute information which has issued an instruction to print electronic data of a print object;~~

~~means a selecting step of extracting selecting information required for user authentication from the attribute information identifying the application received in said receiving step; and~~

~~means a sending step~~ of sending print information appended with the ~~extracted~~ selected information to a printer.

17. (Currently Amended) A server in an ~~automatic~~ authentication system which executes a print process that requires user authentication, comprising:

~~means of receiving information; which is required for user authentication and is extracted from attribute information related to an application and/or a document for the print process; identifying an application which has issued an instruction to print~~
electronic data of a print object from a printer driver via a network;

~~means of checking a user authentication result by comparing the extracted~~
received information with user authentication information which is registered in advance;
and

~~means of returning the user authentication result to the printer driver via the~~
network.

18. (Currently Amended) The server according to claim 17, wherein said receiving means further receives user information from the print driver, and the user authentication information which is registered in advance contains related information of a user and a department of a group to which the user belongs, and

~~said server further comprises means of, when user authentication has succeeded and a print process is executed, executing an accounting process of expendables associated with the document print process for each user or each department of the group to which the user belongs.~~

19. (Currently Amended) The server according to claim ~~[[17]]~~ 18, wherein the user authentication information which is registered in advance contains related information of a user and a department of a group to which the user belongs, and said server further comprises means of, when user authentication has succeeded and a print process is executed, executing an accounting process associated with use of the application for each user or each department of the group to which the user belongs.

20. (Original) The server according to claim 17, further comprising: means of registering and holding various kinds of attribute information of departments, affiliations, individuals, print accounting states, associated with clients, users, and groups who make a document print process; and means of updating use states of a printer used in a print process for respective departments, affiliations, and individuals.

21. (Original) The server according to claim 20, wherein the attribute information contains various kinds of document attribute information including at least one of a document name, application name, document creator/updater, affiliation of the document creator/updater, password, create/update date, which are sent from a print server or client and are associated with a document print process, and said checking means comprises means of executing department authentication of a user, group, affiliation, or the like by comparing a document

creator/updater, affiliation of the document creator/updater, and password registered in said server on the basis of the various kinds of document attribute information.

22. (Currently Amended) The server according to claim [[17]] 20, wherein the attribute information contains various kinds of application attribute information including at least one of an application name, application user, affiliation of the application user, password, use date, which are associated with the application used, and

said checking means comprises means of granting permission of use of the application on the basis of the application attribute information.

23. (Currently Amended) A printer in an ~~automatic~~ authentication system which executes a print process that requires user authentication, comprising:
means of receiving information; ~~which is required for user authentication and is extracted from attribute information related to an application and/or a document for the print process;~~ identifying an application which has issued an instruction to perform the print process from a printer driver together with print information;

means of inputting user authentication information; and

means of executing user authentication on the basis of a comparison result of the information ~~required for user authentication~~ identifying the application and the input user authentication information.

24. to 26. (Cancelled).

27. (Currently Amended) An information processing apparatus ~~connecting communicating~~ with an external information processing apparatus performing a user authentication for a print process, comprising:

extracting means of extracting information ~~related to~~ identifying an application ~~and/or a document for the print process as attribute information which has issued an instruction to print electronic data of a print object;~~ and

output means of outputting the ~~attribute~~ information extracted by said extracting means to said external information processing apparatus ~~using~~ to use the ~~attribute~~ information for a user authentication for the print process.

28. (Currently Amended) The apparatus according to claim 27, wherein said ~~attribute~~ information further contains various kind of document attribute information including at least one of a document name, document creator, application of the document creator, create date which are associated with a document print process.

29. (Currently Amended) The apparatus according to claim 27, wherein said ~~attribute~~ information further contains an application name indicating an application to be used.

30. (Currently Amended) The apparatus according to claim 27, wherein said extracting means extracts the ~~attribute~~ information by calling a printer driver module and API provided between OS and the printer driver module and causing OS to operate a document in said apparatus.

31. (Original) The apparatus according to claim 30, wherein said API is provided in the printer driver module.

32. (Currently Amended) The apparatus according to claim 30, wherein said extracting means calls said API in response to a print instruction ~~instructor~~ inputted from the application.

33. (New) A user authentication method of an information processing apparatus communicating with an external information processing apparatus performing a user authentication for a print process, comprising:

an extracting step of extracting information identifying an application which has issued an instruction to print electronic data of a print object; and

an output step of outputting the information extracted by said extracting step to said external information processing apparatus to use the information for a user authentication for the print process.

34. (New) The method according to claim 33, wherein said information further contains various kind of document attribute information including at least one of a document name, document creator, application of the document creator, create date which are associated with a document print process.

35. (New) The method according to claim 33, wherein said information further contains an application name indicating an application to be used.

36. (New) The method according to claim 33, wherein in said extracting step, the information is extracted by calling a printer driver module and API provided between OS and the printer driver module and causing OS to operate a document in said apparatus.

37. (New) The method according to claim 36, wherein said API is provided in the printer driver module.

38. (New) The method according to claim 36, wherein in said extracting step, said API is called in response to a print instruction inputted from the application.

39. (New) A user authentication method of a server in an authentication system which executes a print process that requires user authentication, comprising:

a receiving step of receiving information identifying an application which has issued an instruction to print electronic data of a print object from a printer driver via a network;

a checking step of checking a user authentication result by comparing the received information with user authentication information which is registered in advance; and

a returning step of returning the user authentication result to the printer driver via the network.

40. (New) A user authentication method of a printer in an authentication system which executes a print process that requires user authentication, comprising:

a receiving step of receiving information identifying an application which has issued an instruction to perform the print process from a printer driver together with print information;

an inputting step of inputting user authentication information; and

an executing step of executing user authentication on the basis of a comparison result of the information identifying the application and the input user authentication information.

41. (New) A computer-readable storage medium storing a computer-executable program for performing the user authentication method according to claim 33.

42. (New) A computer-readable storage medium storing a computer-executable program for performing the user authentication method according to claim 39.

43. (New) A computer-readable storage medium storing a computer-executable program for performing the user authentication method according to claim 40.